

## Montgomery County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Montgomery County economy.<sup>1</sup>

These 21 sectors have a total direct output of approximately **\$305.9 million** and support **1,261 jobs** in Montgomery County. Running the model for all 21 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Montgomery County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
Direct Effect	1260.5	6.24%	\$94,423,427	5.58%	\$305,923,690
Indirect Effect	263.9	1.31%	\$28,147,309	1.66%	\$70,440,237
Induced Effect	169.3	0.84%	\$10,682,608	0.63%	\$20,029,068
<b>Total Effect</b>	<b>1693.6</b>	<b>8.39%</b>	<b>\$133,253,344</b>	<b>7.87%</b>	<b>\$396,392,995</b>

As shown in the above table, agriculture, food, and food processing sectors support **1,694 jobs**, or **8.39%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately **\$133.3 million**, or **7.87% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **536 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Montgomery County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	535.9	\$44,432,405
Animal production, except cattle and poultry and eggs	209.4	\$19,589,854
Nitrogenous fertilizer manufacturing	118.3	\$125,419,398
Grain farming	87.8	\$23,417,480
Dairy cattle and milk production	66.2	\$30,624,655
Landscape and horticultural services	47.3	\$2,835,956
Wholesale trade	41.0	\$8,087,836
All other crop farming	37.7	\$2,160,665
Veterinary services	36.8	\$3,335,589
Real estate	26.6	\$3,206,611

The nitrogenous fertilizer manufacturing sector directly contributes approximately **\$125.4 million** to the Montgomery County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Nitrogenous fertilizer manufacturing	118.3	\$125,419,398
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	535.9	\$44,432,405
Dairy cattle and milk production	66.2	\$30,624,655
Petroleum refineries	3.5	\$25,048,664
Grain farming	87.8	\$23,417,480
Oilseed farming	25.4	\$19,623,888
Animal production, except cattle and poultry and eggs	209.4	\$19,589,854
Flour milling	14.7	\$17,878,737
Oil and gas field machinery and equipment manufacturing	26.1	\$9,580,374
Natural gas distribution	17.7	\$8,530,309

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Montgomery County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	25.4	\$19,623,888.02
Grain farming	87.8	\$23,417,480.47
Vegetable and melon farming	0.1	\$24,990.10
Fruit farming	2.7	\$285,584.39
Tree nut farming	2.3	\$386,316.69
Greenhouse, nursery, and floriculture production	8.7	\$1,630,684.61
All other crop farming	37.7	\$2,160,664.80
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	535.9	\$44,432,403.56
Dairy cattle and milk production	66.2	\$30,624,654.77
Poultry and egg production	2.0	\$1,634,716.99
Animal production, except cattle and poultry and eggs	209.4	\$19,589,853.29
Commercial logging	1.9	\$51,430.80
Commercial hunting and trapping	1.9	\$36,873.14
Support activities for agriculture and forestry	17.3	\$755,900.68
Flour milling	14.7	\$17,878,736.50
Bread and bakery product, except frozen, manufacturing	17.1	\$2,089,893.10
Frozen cakes and other pastries manufacturing	0.8	\$129,628.75
Nitrogenous fertilizer manufacturing	118.3	\$125,419,395.45
Farm machinery and equipment manufacturing	26.1	\$9,579,045.30
Veterinary services	36.8	\$3,335,588.93
Landscape and horticultural services	47.3	\$2,835,955.62

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Montgomery County, the retail sector was omitted.